

ABSTRACT OF THE DISCLOSURE

An image data collecting device for analysis of material structure, including: a flexible belt which is formed in ring shape and conveyed in the long direction thereof; an accumulated fluorescent sheet which is formed in ring shape commensurate with the configuration of the flexible belt and mounted on the flexible belt and where a radiant image data from a material to be analyzed is recorded; a recording means to record the radiant image data into the accumulated fluorescent sheet by irradiating a given radiant ray onto the material; a reading means to read out the radiant image data by irradiating excitation light; and a deleting means to remove radiant energy remaining in the accumulated fluorescent sheet after reading operation by the reading means and before subsequent recording operation by the recording means.